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09/854,691	05/15/2001	Tadashi Endo	029650-097	8113

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EXAMINER

GILLIAM, BARBARA LEE

ART UNIT	PAPER NUMBER
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1752

DATE MAILED: 02/07/2003

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/854,691

Applicant(s)

ENDO ET AL.

Examiner

Barbara Gilliam

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on prior art filed 8/28/02.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 17 and 18 is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☒ Claim(s) 7-8 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 May 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☒ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2.
- 4) ☐ Interview Summary (PTO-413) Paper No(s) _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

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DETAILED ACTION

1. Claims 1-18 are pending.
2. Claims 2-3, 9-10, 12 and 15 describe various properties as "regulated by JIS -----". JIS refers to the Japanese International Standard as disclosed by Katsuoka et al (US 6,508,170 column 2, lines 20-21) which suggests one of ordinary skill in the art is familiar with such regulatory standards.

Priority

3. Acknowledgment is made of applicant's claim for foreign priority based on an application filed in Japan on 5/15/2000. It is noted, however, that applicant has not filed a certified copy of the 2000-141484 application as required by 35 U.S.C. 119(b).
4. Acknowledgment is made of applicant's claim for foreign priority based on an application filed in Japan on 6/21/2000. It is noted, however, that applicant has not filed a certified copy of the 2000-186005 application as required by 35 U.S.C. 119(b).
5. Acknowledgment is made of applicant's claim for foreign priority based on an application filed in Japan on 8/28/2000. It is noted, however, that applicant has not filed a certified copy of the 2000-257559 application as required by 35 U.S.C. 119(b).
6. Acknowledgment is made of applicant's claim for foreign priority based on an application filed in Japan on 8/29/2000. It is noted, however, that applicant

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has not filed a certified copy of the 2000-258688 application as required by 35 U.S.C. 119(b).

7. Acknowledgment is made of applicant's claim for foreign priority based on an application filed in Japan on 9/25/2000. It is noted, however, that applicant has not filed a certified copy of the 2000-291113 application as required by 35 U.S.C. 119(b).

Claim Objections

8. Claims 7 and 8 are objected to because to the claim language.

a. Although claims 7 and 8 depend from claims 4 and 5 respectively, the language used therein is typically used in multiply dependent claims. For clarification purposes, the Examiner suggests using conventional

language.***Claim Rejections - 35 USC § 102***

9. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

10. Claims 2-15 are rejected under 35 U.S.C. 102(b) as being anticipated by Nishino et al.

a. In US Patent No. 6,264,821, Nishino et al teach a process for producing an aluminum support of a lithographic printing plate, the desired aluminum support comprising fine asperities is produced by imparting roughening it electrochemically in an acidic aqueous solution (abstract). The

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preliminary formation of fine asperities is followed by chemical etching in an aqueous solution of an acid or an alkali or electropolishing in an aqueous solution of a acid or alkali. Prior to or after or both before and after the electropolishing of the plate, the plate is subjected to chemical dissolution. Subsequently the plate is preferably desmuted in an acidic aqueous solution and subjected to anodization in order to enhance the wear resistance (column 5, line 50 – column 6, line 12). After anodization, the is hydrophilized (column 6, lines 13-14) which meets the present limitations for the water wettability treatment. The plate comprises honeycomb pits having an average diameter of 0.1 to 3 mm (column 2, lines 26-32). The lithographic printing plate aluminum substrate comprises an 85 deg. gloss as specified in JIS Z9741-1983 and which is measured before application of a light-sensitive layer is no more than 30 (column 15, lines 13-15). The 85 deg. gloss of the aluminum plate of Examples 3-2 is 20 (column 19, lines 37-40). Nishino et al do not disclose any further properties of the grained aluminum substrate such as the dimensions of the concave portions. However, the Examiner asserts one of ordinary skill in the art would expect properties inherent to the substrate to be similar to the properties of the substrate of the present application such as those of the concave portions, the number of waves, the 10-point average roughness and the number of roughness curve peaks because of the identical 85 deg. gloss range of the two substrates and the overlap in preferred surface roughness.

b. ^{7,8,} It is noted that claims 2-6, 9-11 and 13-15 are product-by-process claim wherein the support is defined by various surface graining treatments.

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Applicant is reminded of MPEP 2112.02: “[E]ven though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process.” However, with respect to the present claims, the teachings of Nishino et al include a the surface treatments.

Claim Rejections - 35 USC § 103

11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

12. Claim 1 is rejected under 35 U.S.C. 10e(a) as being obvious over Sawada et al in view of Urano et al.

a. In US Patent No. 5,779,824, Sawada et al teach an aluminum alloy support for a planographic printing plate and a method for producing the aluminum alloy support (abstract). The aluminum plate is first etched with an alkali at a rate of 0.1 to 5g/m² and preferably a rate of 0.01 to 1.5g/m² if the plate contains a large amount of impurities (column 9, lines 15-29). In Examples II-1 - II-13 the alloy supports are first etched with alkali at a rate of 5g/m². The supports were electrochemically grained, subjected to a chemical etching treatment and subjected to an anodic oxidation treatment (column 17, lines 19-

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43). An anodized film is formed as a result of the anodic oxidation treatment (column 10, lines 9-20). The anodized film meets the present limitation for the intermediate layer. The alkali etch treatment, the graining treatment and the anodizing treatment meet the respect limitations of the present application. A photosensitive composition was coated on the obtained supports at a dry coating weight of 2.0 g/m² and subjected to exposure with a metal halide lamp (column 44-67). Sawada et al is silent with respect to the thickness of the photosensitive layer. It would have been obvious to coat the photosensitive layer at a thickness conventional in the art such as the thickness of the photosensitive layer of Urano et al in US Patent No. 6,200,727.

b. In US Patent No. 6,200,727, Urano et al teach a positive photosensitive composition that is preferably coated on surface treated aluminum substrate at a thickness of 0.3 to 7 μm to form a positive photosensitive lithographic printing plate (abstract & column 42, lines 15-37).

c. Therefore it would have been obvious to one of ordinary skill in the art to make a planographic printing plate comprising an etched, grained and anodized aluminum alloy substrate, an anodized film and a photosensitive layer wherein the photosensitive layer is coated to a thickness of 0.3 to 7 μm with reasonable expectation of obtaining a low cost planographic printing plate based on the teachings of Sawada et al (column 3, lines 21-27) in view of Urano et al. The Examiner asserts the thinnest 10% of the photosensitive layer of Urano et al having an overall thickness of 0.3 μm falls within the required range of the instant application.

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d. It is noted this is a product-by-process claim wherein the plate is defined by the surface treatments. Applicant is reminded of MPEP 2112.02: "[E]ven though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process." However, with respect to present claim 1, Sawada et al clearly teach the alkali treatment, the graining treatment and the anodizing treatment as required in the process limitations of the product claim.

13. Claims 15-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Urano et al in view of Nishino et al.

a. In US Patent No. 6,200,727, Urano et al teach a positive photosensitive composition comprising an alkali soluble resin having phenolic hydroxyl groups, of which at least some esterified (a) and a photo-thermal conversion material (b), and not containing a quinonediazide compound (abstract). The alkali soluble resin and photothermal conversion material of Urano et al meet the present limitations for the high-molecular compound and the infrared absorbent respectively. The photosensitive composition is preferably coated on surface treated aluminum substrate with a roughness of 0.3 to 1.0 μm to form a positive photosensitive lithographic printing plate precursor (column 42, lines 15-44) which can be exposed with a laser beam having a wavelength

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within a range of from 650 to 1,300 nm and then developed to form a positive image (column 3, lines 19-24). Urano et al do not teach the 85 deg. glossiness of the aluminum substrate.

b. In US Patent No. 6,264,821, Nishino et al teach a process for producing an aluminum support of a lithographic printing plate, the desired aluminum support is produced by imparting roughening it electrochemically in an acidic aqueous solution. The roughened aluminum plate may be electropolished or chemically etched (abstract). The lithographic printing plate aluminum substrate comprises an 85 deg. gloss as specified in JIS Z9741-1983 and which is measured before application of a light-sensitive layer is no more than 30 (column 15, lines 13-15). The 85 deg. gloss of the aluminum plate of Examples 3-2 is 20 (column 19, lines 37-40). The preferable 85 deg. glossiness range of the prior art aluminum substrate is identical to the 85 deg. glossiness range of the present application. Besides the glossiness and average surface roughness, Nishino et al do not disclose any further properties of the grained aluminum substrate such as the dimensions of the concave portions. However, the Examiner asserts one of ordinary skill in the art would expect properties inherent to the substrate to be similar to the properties of the substrate of the present application such as those of the concave portions because of the identical glossiness of the two substrates.

c. Therefore it would have been obvious to one of ordinary skill in the art to coat a surface treated aluminum substrate having a roughness of 0.3 to 1.0 μm with an alkali soluble resin comprising phenolic hydroxyl groups, of which at

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least some esterified, a photo-thermal conversion material and not containing a quinonediazide compound wherein the support has an 85 deg. glossiness of 30 or less with reasonable expectation of improving contamination performance based on the teachings of Nishino et al and Urano et al.

Allowable Subject Matter

14. Claims 17 and 18 are allowed.

15. The following is an examiner's statement of reasons for allowance:

a. There is no teaching or suggestion in the prior art of record, specifically JP 62-109041 of a support comprising an anodized layer thereon wherein the anodized layer comprises micropores with a diameter and density to satisfy the inequality equation required in claim 17. In JP 62-109041, the average pore can be 900 Angstroms and the density is 100 pieces/m² (abstract), which does not satisfy the inequality equation of claim 17.

b. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

16. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

a. In US Patent Application No. 2002/0153253, Nishino et al teach an aluminum support for lithographic printing plate and production method thereof.

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- b. In US Patent Application No. 2002/0029710 Sawada et al teach supports for lithographic printing plates.
- c. In US Patent Application No. 2001/0024799, Nishino et al teach the process for producing aluminum support for lithographic printing plate.
- d. In US Patent No. 6,494,137, Sawada et al teach a support for lithographic printing plate and presensitized plate.
- e. In US Patent No. 6,423,471, Sorori et al teach a photosensitive composition and method of making lithographic printing plate.
- f. In US Patent No. 6,399,279, Urano et al teach a method for forming a positive image.
- g. In US Patent No. 6,232,037, Uesugi et al teach a lithographic printing plate.
- h. In US Patent No. 6,114,089, Takita et al teach a positive working photosensitive lithographic printing plate.
- i. In US Patent No. 5,837,345, Nishino et al teach a support for lithographic printing plate.
- j. In JP 9-142049, Nishino et al teach an aluminum substrate for lithographic printing plate and manufacture thereof.
- k. In JP 60-063341, Shimizu et al teach a high strength aluminum alloy plate for printing plate.
- l. In JP 60-036195, Shimizu et al teach a base for planographic printing plate.

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17. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Barbara Gilliam whose telephone number is 703-305-1330. The examiner can normally be reached on Monday through Thursday.

a. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Janet Baxter can be reached on 703-308-2303. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9310 for regular communications and 703-872-9311 for After Final communications.

b. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.

B. Gilliam

B. Gilliam
January 27, 2003


JANET BAXTER
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